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55 . (Amended) The package of claim 34, wherein the at least one photonic device is a VCSEL.

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C.4

56 . (Amended) The package of claim 33, wherein said first housing comprises ceramic.

57 . (Amended) The package of claim 33, wherein said window comprises quartz.

Remarks

This preceding amendments and following remarks are provided in response to the Official Action of the Examiner mailed September 20, 2002, setting a one-month shortened statutory period for response ending October 20, 2002. Enclosed herewith is a petition for a one-month extension of time extending the time for response until November 20, 2002.

In the Official Action, the Examiner restricted the pending claims into two groups of patentably distinct species, namely: Group I which correspond to claims 1-11, and 33-57 as drawn to a chip scale package that is hermetically sealed by a window and an enclosure besides a housing; and Group II which corresponds to claims 12-32 as drawn to a chip scale package that is hermetically sealed by a first housing and a window. The Examiner indicates that Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims will be restricted if no generic claim is finally held to be allowable. The Examiner states that no claims are currently generic.

After reviewing the pending claims, Applicant believes that the distinction drawn by the Examiner between Group-I and Group-II is not proper. It appears that the difference between

Group I and Group II is that Group I is drawn to a chip scale package that is sealed by a window and an enclosure besides a housing, and Group II corresponds to a chip scale package that is sealed by a first housing and a window. Applicant believes that the enclosure referred to by the claims of Group I corresponds to the first housing in the claims of Group II. Thus, the distinction identified by the Examiner appears to have little significance. To clarify the claims, however, Applicant has amended the claims of Group I to replace the term "enclosure" with --housing-- or equivalent. Other amendments have also been made to more clearly define the invention and to correct minor errors. In any event, if the Examiner elects to maintain the election/restriction requirement, Applicant hereby elects to prosecute the species of Group I, with traverse, which includes claims 1-11, and 33-57.

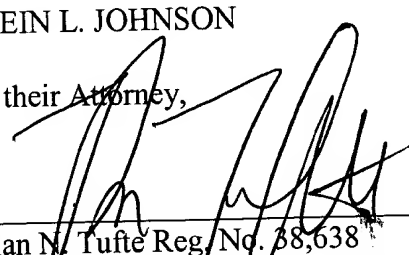
Finally, Applicant notes that the Examiner did not provide an initialed copy of the Form-1449 that was filed on November 10, 1999. Applicant respectfully requests that the Examiner provide the initialed copy with the next Official Action. Examination and consideration are respectfully requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By their Attorney,

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Version With Markings to Show Changes Made

The claims has been amended as follows:

1. (Amended) A chip-scale package for photonic devices, comprising:
a window;
a chip fixed on a first side of said window; and
a first housing [an enclosure formed over] extending around said chip and [on]
fixed relative to said window.
2. (Amended) The package of claim 1, wherein said chip is hermetically sealed by said window and said first housing [enclosure].
3. (Amended) The package of claim 2, wherein said [cover] first housing is sealed to said window at the periphery of said window by a sealing-type material.
5. (Amended) The package of claim 4, wherein said chip comprises a photonic device having one or more electrical terminals.
6. (Amended) The package of claim 5, wherein at one of said one or more electrical terminals [chip] is connected to at least one of the at least one conductive trace.
7. (Amended) The package of claim 6, further comprising a second housing [formed around said] situated adjacent to a second side of said window.

8. (Amended) The package of claim 7, further comprising a ferrule having at least one optical fiber, which is placed [against the] adjacent said second side of said window.

9. (Amended) The package of claim 8, further comprising a lens formed on or in said window.

10. (Amended) The package of claim 9, wherein said ferrule is [plugged into] accepted by an opening [formed by] in said second housing.

11. (Amended) The package of claim 10, wherein [the] an end of said optical fiber is proximate to said window so that light from the fiber can go through the optical fiber and said window to the photonic device, and/or so that light from the photonic device can go through said window and the least one optical fiber.

12. (Amended) A chip-scale package for photonic devices, comprising:
a first housing;
a chip attached relative to said first housing; and
a window attached relative to said first housing.

13. (Amended) The package of claim 12, further comprising:
at least one conductive trace formed on said window; and

the at least one conductive trace is connected to said chip and to a pad of said first housing.

22. (Amended) The package of claim 21, wherein said window has at least one lens situated between the at least one photonic device and the at least one optical waveguide.

24. (Amended) A hermetic chip-scale package comprising:
a first housing;
an integrated circuit mounted within said first housing;
a window secured relative to [situated on] said first housing; and
wherein:
said integrated circuit has at least one photonic device; and
said first housing and said window form a hermetically sealed enclosure around
said integrated circuit.

26. (Amended) The package of claim 25, comprising a conductor connected to the at least one conductive trace, for providing a connection from the at least one conductive trace external to the hermetically sealed enclosure.

27. (Amended) The package of claim 26, further comprising a [receptacle having] second housing situated adjacent to said window [situated at an end of said receptacle], wherein said [receptacle] second housing has at least one alignment feature.

28 [26]. (Amended) The package of claim [25] 27, further comprising a plug having an at least one optical waveguide, wherein said plug fits into said [receptacle] second housing and is aligned with the at least one alignment feature such that one end of the at least one optical waveguide is [appropriately] proximate to said window.

29 [27]. (Amended) The package of claim [26] 28, wherein the one end of the at least one optical waveguide is aligned with the at least one photonic device.

30 [28]. (Amended) The package of claim [27] 29, further comprising at least one pin securing said plug in said [receptacle] second housing.

31 [29]. (Amended) The package of claim 28, wherein the at least one photonic device is a VCSEL.

32 [30]. (Amended) The package of claim 29, wherein:
said first housing is composed of ceramic; and
said window is composed of quartz.

33 [31]. (Amended) A chip-scale package for electronic devices,
comprising:

a transparent window having at least one conductive trace patterned on a surface
of said window;
a semiconductor chip fixed [on] relative to said window having at least one
terminal connected to the at least one conductive trace;
a first housing [an enclosure] surrounding said chip and affixed to said window;
and
a conductive path from the at least conductive trace to an at least one pad on an
external surface of said enclosure.

\ 34 [32]. (Amended) The package of claim [31] 33, wherein said chip
comprises a photonic device.

NWK ^{option} 35 [33]. (Amended) The package of claim [32] 34, wherein said window
has at least one feature on the surface of said window for alignment.

\ 36 [34]. (Amended) The package of claim [32] 34, wherein the
conductive path is partially embedded in said [enclosure] first housing.

under 33ing 37 [35]. (Amended) The package of claim [34] 36, wherein the
conductive path is connected on one end to a pad on the external surface of said
[enclosure] first housing.

make NWK ST
38 [36]. (Amended) The package of claim [35] 37, wherein said [enclosure has at least one] conductive path is connected on another end to another pad which is connected to the at least one said conductive trace on said window.

✓ 39 [37]. (Amended) The package of claim [36] 38, wherein said first housing [enclosure] is sealed to said window at a periphery of said window.

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40 [38]. (Amended) The package of claim [37] 39, wherein said first housing [enclosure] is sealed to said window at the periphery of said window by a solder-type material.

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41 [39]. (Amended) The package of claim [37] 39, wherein said first housing [enclosure] is sealed to said window at the periphery of said window by an adhesive-type material.

✓ 42 [40]. (Amended) The package of claim [37] 39, wherein said chip is hermetically sealed by said window and [enclosure] said first housing.

✓ 43 [41]. The package of claim [37] 39, wherein said chip is environmentally sealed by said window and [enclosure] said first housing.

NWK-1
44 [42]. (Amended) The package of claim [40] 42, wherein said window has at least one refractive optical element on the surface of said window.

NWK-12
45 [43]. The package of claim [41] 43, wherein said window has at least one refractive optical element on the surface of said window.

NWK-3
46 [44]. (Amended) The package of claim [40] 42, wherein said window has at least one diffractive optical element on the surface of said window.

47 [45]. (Amended) The package of claim [41] 43, wherein said window has at least one diffractive optical element on the surface of said window.

48 [46]. (Amended) The package of claim [33] 35, further comprising a second housing attached to said first housing [enclosure].

49 [47]. (Amended) The package of claim [46] 48, wherein said second housing is mechanically registered to said [enclosure] first housing by the at least one feature on the surface of said window.

50 [48]. (Amended) The package of claim [47] 49, further comprising a ferrule having at least one optical waveguide.

51 [49]. (Amended) The package of claim [48] 50, wherein the at least one optical waveguide is proximate to said window so that light from the waveguide can

pass through said window to the at least one photonic device, and/or so that light from the photonic device can go through said window and to the at least one optical waveguide.

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52 [50]. (Amended) The package of claim [49] 51, wherein said window has at least one lens situated between the at least one photonic device and said at least one optical waveguide.

53 [51]. (Amended) The package of claim [50] 52, wherein the at least one optical waveguide is an optical fiber.

54 [52]. (Amended) The package of claim [49] 51, further comprising at least one pin securing said ferrule to said [enclosure] first housing.

55 [53]. (Amended) The package of claim [32] 34, wherein the at least one photonic device is a VCSEL.

56 [54]. (Amended) The package of claim [31] 33, wherein said [enclosure] first housing comprises ceramic.

57 [55]. (Amended) The package of claim [31] 33, wherein said window comprises quartz.